

### **REMARKS**

The present Amendment amends claim 36 and leaves claims 35 and 37 unchanged. Therefore, the present application has pending claims 35-37.

In paragraph 6 of the Office Action the Examiner objected to an informality in the specification on page 3, line 12. An amendment was made to the specification to correct the informality noted by the Examiner. Therefore, this objection is overcome and should be withdrawn.

In paragraph 7 of the Office Action the Examiner objected to claims 36 and 37 due to informalities. Amendments were made to claims 36 and 37 to correct the informalities noted by the Examiner. Therefore, this objection is overcome and should be withdrawn.

Claims 35-37 stand rejected under 35 USC §103(a) as being unpatentable over Rabinovich (U.S. Patent No. 6,256,675) in view of Olson (U.S. Patent No. 5,995,980) in view of Hammond (U.S. Patent No. 5,758,337). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as recited in claims 35-37 are not taught or suggested by Rabinovich, Olson or Hammond whether taken individually or in combination with each other as suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

The present invention as recited in the claims has numerous features not taught or suggested by Rabinovich, Olson or Hammond whether taken individually or in combination with each other. Arguments showing the differences between the features of the present invention as recited in the claims and Rabinovich and Olson

were provided in the Remarks of the September 19, 2002 Amendment, said Remarks being incorporated herein by reference.

As set forth in the claims, a replica management table as illustrated in Fig. 8 holds at least a data range 801 and data updating interval 803 of each replica stored in a storage device 112 as illustrated in Fig. 1 of the present application. A replica creation request is issued from a client device 103 to a data collector 101. The data collector 101 has a replica creation control means 106, 107 which determines whether a new replica is to be created by referring to the replica management table and a storage device 112 which stores the new replicas that were created. If the data range and the data updating interval of the requested replica meets those of a stored replica, a new replica is not created. In order to understand these features of the present invention the Examiner's attention is directed to page 19, lines 5-11 of the present application.

Thus, according to the present invention the data collector 101 is a type of data cache as described on page 22, line 20 through page 29, line 23 of the present application. The data collector 101 of the present invention transfers a request for making a replica of data stored in a storage unit 121. Thus, according to the present invention data from the replicas in each server are collected and stored in the storage unit 112 so as to form a new replica if such does not already exist. Clients then may first access the storage unit 112 for desired data. Therefore, according to the present invention it is possible to have data 123 shared among clients 103, 104, thereby reducing the load on the server. The Examiner's attention is directed to page 30, lines 1-14 of the present application.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by Rabinovich. Rabinovich merely teaches in Fig. 1 thereof that a request distributor 101 distributes a request from requestor 109. As taught by Rabinovich the request distributor 101 selects a host to respond to the request for an object as discussed in col. 4, lines 41-65. Thus, in Rabinovich as illustrated in Fig. 1 there are no data (object) in the request distributor 101 which can be accessed by the clients. In Rabinovich, a replica is only stored in the host 103.

In the Office Action the Examiner alleges that the request distributor 101 corresponds to the data collector 101 of the present invention. However, such is not the case since the request distributor 101 as taught by Rabinovich just distributes requests and does not collect and store data in the form of a replica accessible to the clients as in the data collector 101 of the present invention as recited in the claims.

Therefore, Rabinovich fails to teach or suggest a data collector, associated with the client device and provided with a storage device, for collecting data requested by users of the client devices and storing the data into the storage device as a replica which is partially replicating the database as recited in the claims.

Further, Rabinovich fails to teach or suggest that the data collector includes a replica creation control means for determining whether a new replica of the database is to be created and stored in the storage device, in response to a replica creation request from one of the client devices, by referring to a replica management table which holds at least a data range and a data updating integral of each replica stored in a storage device as recited in the claims.

Still further, Rabinovich fails to teach or suggest that the data collector also includes a query analysis unit for analyzing a query processing request from one of the client devices to select, as an object to be searched, a replica stored in the storage device or the database, a query processing unit for searching the replica stored in the storage device according to a query analysis result from the query analysis unit, and a communication control unit for selecting a procedure for accessing the server according to the query analysis result as recited in the claims.

Still further yet, Rabinovich fails to teach or suggest a server which includes a communication control unit for receiving the query analysis result transmitted from the data collector, and a query processing unit for searching the database of the server as recited in the claims.

Thus, as is quite clear from the above, Rabinovich fails to teach or suggest numerous features of the present invention now more clearly recited in the claims. The above noted deficiencies of Rabinovich are not supplied by any of the other references of record namely Olson and Hammond. Therefore, combining the teachings of Rabinovich, Olson and Hammond in the manner suggested by the Examiner still fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

Thus, the features of the present invention as now more clearly recited in claims 35-37 are not taught or suggested by Rabinovich, Olson and Hammond whether taken individually or in combination with each other as suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider

and withdraw the 35 USC §103(a) rejection of claims 35-37 as being unpatentable over Rabinovich, Olson and Hammond.


The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references utilized in the rejection of claims 35-37.

In view of the foregoing amendments and remarks, Applicants submit that claims 35-37 are in condition for allowance. Accordingly, early allowance of claims 35-37 is respectfully requested.

Please charge any shortage in fees due in connection with the filing of this paper, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (501.37841X00).

Respectfully submitted,

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